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### Message from the Assistant Administrator

am proud to present the fiscal year (FY) 2006 accomplishments of the U.S. Environmental Protection Agency's (EPA's) Office of Enforcement and Compliance Assurance (OECA). These results demonstrate that we are making significant progress in protecting the nation's environment and public health, and achieving lasting environmental results. The OECA FY 2006 accomplishments rank among the top three years in the Agency's history. Environmental results are apparent through America's cleaner air, purer water and better-protected land. This report highlights a variety of areas in which significant environmental accomplishments and results were obtained.



In FY 2006, our noteworthy results included precedent-setting civil and criminal enforcement actions addressing serious environmental problems. These results were obtained through a combination of strategic national civil and criminal enforcement priorities, including targeted compliance assistance, monitoring, and incentives. Our priority enforcement activities are responsible for nearly 75 percent of the 890 million pounds of pollutant reductions achieved, as well as more than 70 percent of the \$4 billion worth of investments in pollution prevention and control obtained in injunctive relief.

Most of EPA's enforcement and compliance assistance activities are conducted by our regional offices. The regional offices serve as the Agency's first point of contact for the regulated community. The regions are critical in achieving the results we highlight. They play a vital role in the enforcement process, from providing compliance assistance and conducting inspections to negotiating settlements or litigating cases. The results we report are a direct result of our regional offices' fine efforts.

Additionally, our counterparts in the states conduct front-line environmental enforcement and compliance activities. In recognition of this fact, and based on a strong desire to strengthen and expand our federal-state enforcement relations,

I extended to the Environmental Council of the States (ECOS)¹ an opportunity to include state accomplishments in this report. I am pleased that they have accepted this opportunity, and I trust that the information on the states' efforts, in addition to the OECA accomplishments we are reporting, will provide a richer and fuller picture of the significant environmental enforcement activities taking place across our nation.

Criminal enforcement, with its potential for incarceration and fines, represents the strongest tool in EPA's enforcement arsenal. The criminal enforcement program has been strengthened by a strategic focus on cases that have the largest environmental impact. This focus has maximized our impact in protecting human health and the environment. Our message for criminal violators is clear: those who knowingly ignore our nation's environmental laws and regulations, whose actions cause or threaten harm for the sake of profit, will put both their fortune and their liberty at risk.

One of EPA's most important goals is to achieve environmental justice. Environmental justice means ensuring the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This report includes OECA's environmental justice activities and progress made in FY 2006 in this vital area.

The public plays a pivotal role in EPA's mission. Just as the public relies on EPA to protect the air, water, and land, EPA relies on the help and support of the public in protecting the environment. Our nation's environment has improved through the commitment and involvement of its citizens. Historically, the broader the public participation, the greater the environmental gain.

<sup>&</sup>lt;sup>1</sup> The Environmental Council of the States (ECOS) is the national non-partisan, nonprofit association of state and territorial environmental commissioners. ECOS' members, environmental commissioners, are responsible at the state level for implementation of environmental programs delegated to them under federal statutes by EPA. Commissioners also are responsible for implementing state laws, reporting to the governor, and working with state legislatures, and are accountable to the public in their state.





Our enforcement toolkit now includes an easy-to-spot badge icon on EPA's home page—marking our site for reporting potential environmental violations. The Report a Violation Web site (www.epa.gov/tips) invites you to be a partner in our work by providing an effective venue for the public to report suspected environmental violations.



Further, OECA's Web site (www.epa.gov/compliance) provides a wealth of information on environmental enforcement and compliance assistance. This Web site is a powerful tool that enables citizens to partner with EPA in our mutual efforts to be good environmental stewards of our air, water and land.

We continue building a vigorous enforcement program by using all of the enforcement and compliance tools available; by developing new, more user-friendly tools; encouraging partnerships with states and tribes; integrating environmental justice into the Agency's overall efforts; and engaging the public. I invite you to read this report and join in this important effort.

Grante G. Makayame

Granta Y. Nakayama

EPA Assistant Administrator for Enforcement and Compliance Assurance

### What We Do

#### **OECA's Mission**

ECA's mission is to improve the environment and protect human health by ensuring compliance with environmental requirements, preventing pollution, and promoting environmental stewardship. The national enforcement and compliance assurance program is characterized by its multimedia scope and breadth. The national program is responsible for maximizing compliance with 10 distinct federal environmental statutes that address prevention and control of air pollution, water pollution, hazardous waste, toxic substances, and pesticides. Criminal enforcement's special agents are fully authorized law enforcement officers who not only enforce all the federal environmental statutes but also enforce U.S. Criminal Code (Title 18) violations often associated with environmental crimes (e.g., conspiracy, false statements). OECA oversees compliance and enforcement activities in 28 separate program areas.

#### Compliance

#### Compliance Assistance

OECA uses a variety of tools to achieve compliance—assistance, incentives, monitoring, and civil and criminal enforcement. OECA's compliance assistance program provides detailed information to hundreds of thousands of regulated entities, helping them understand and meet their environmental obligations. It is a vibrant, multi-faceted program that delivers compliance assistance ranging from electronic materials to workshops and onsite visits. Through partnerships with other compliance assistance providers (e.g., trade associations, academic institutions, nonprofit organizations, state and local governments) OECA has enlarged the inventory of resources available to regulated entities, developed specialized sources of in-depth information, and created forums for exchange of "best practices."

In FY 2006 alone, OECA provided compliance assistance to more than 878,000 individuals and businesses. OECA staff also develops and delivers compliance assistance resources that are used by other assistance providers. Additionally, each of EPA's 10 regional offices has developed compliance assistance, pollution prevention, and innovation resources targeted toward the compliance needs of its region.

OECA targets areas where environmental regulations are potentially misunderstood. Compliance assistance resources include virtual Compliance Assistance Centers, comprehensive Web sites, compliance guides and training materials, as well as diverse outreach efforts aimed at specific business communities or industry sectors. OECA is constantly expanding



both the number and scope of these valuable tools in order to reach other areas of compliance problems, additional business sectors, and more individuals. These efforts are yielding results. In FY 2006, 88 percent of the centers' regulated entity survey respondents reported that they increased their understanding of environmental requirements; 82 percent reported that they improved their environmental management practices; and 55 percent reported that they reduced, treated or eliminated pollution as a result of center assistance.

#### **Compliance Monitoring**

OECA monitors activities to ensure that the regulated community is complying with environmental laws and regulations. Monitoring is achieved through onsite visits by qualified inspectors and by reviewing the information that EPA, a state, or a tribe requires the regulated party to submit. A broad spectrum of data is collected, reflecting the diverse requirements of the various federal environmental laws.



Edwin Piñero
Federal Environmental Executive
About 2004 EPA partnership with federal agencies:

"As the Federal Environmental Executive, my office and I are very pleased to work with EPA and the Army Corps of Engineers Construction Engineering Research Laboratory on FedCenter (www.fedcenter.gov), the new environmental stewardship and compliance assistance center designed for U.S. government facilities. FedCenter enables federal facilities to pool expertise and resources, collaborate toward better environmental performance and take a leadership role in environmental stewardship. We look forward to continuing our partnership with EPA, the Corps and other agencies as FedCenter evolves into an environmental resource owned, operated and used by the entire federal community."

In FY 2006, OECA conducted more than 23,000 compliance inspections and performed more than 352 complex civil investigations under nine statutory programs. If inspections reveal evidence of a potential criminal violation of environmental law, or if a review of data indicates possible fraud, the criminal enforcement program is asked to investigate. The criminal program investigated 305 new environmental crime cases in FY 2006 and helped successfully prosecute significant cases.

#### Compliance Incentives

EPA uses its compliance incentive policies to promote self-policing, improve environmental management practices, and reduce pollution in the environment. In exchange for mitigation of civil penalties, EPA's compliance incentive policies—the EPA Audit Policy and Small Business Policy—encourage regulated entities to proactively audit their compliance status, disclose their violations to EPA, return to compliance, and do whatever is necessary to maintain compliance. Self-auditing and selfdisclosure under the Audit Policy help EPA and industry to conserve resources by avoiding costly litigation. The Small Business Policy also promotes compliance specifically for small businesses (100 or fewer employees) by providing incentives for disclosure and correction of violations that include elimination of penalties entirely. In FY 2006, tailored incentive programs in particular sectors (e.g., colleges/universities and healthcare) and corporate-wide auditing agreements improved compliance and environmental management. In FY 2006, OECA resolved a five-year record number of voluntary disclosures (1,475).

#### **Enforcement**

A strong commitment to civil and criminal enforcement is vital to our program. OECA and its partners—the U.S. Department of Justice, states, tribes, and local governments—work together to ensure that our nation's environmental laws are followed and achieve environmental improvements needed to protect human health and the environment.

#### Civil Enforcement

Civil enforcement actions can be administrative or judicial. Administrative actions are a form of civil action brought before an Agency decision-maker, rather than a federal court judge. In judicial actions, EPA is represented by the Department of Justice.

OECA brings administrative and judicial actions that are usually resolved by settlements which often can require polluters to:

- Pay penalties
- Implement, repair, and upgrade pollution control technologies
- Correct compliance problems
- Clean up waste and/or take action to reduce pollution and prevent problems from recurring

Civil actions can achieve significant health and environmental protections—addressing illegal contamination of air, water, and land by businesses, governments, individuals, and other entities, curing violations and preventing future contamination.

In many settlements, Supplemental Environmental Projects (SEPs) are environmentally beneficial actions that a violator agrees to perform as part of an enforcement settlement. SEPs go beyond compliance and provide significant additional benefits to public health and the environment. In FY 2006, violators in 220 civil enforcement cases agreed to implement SEPs with a value of more than \$78 million.



## Animal Feeding Operations (AFO) Air Compliance Agreement

More than 2,500 animal feeding operations (AFOs) entered into consent agreements with OECA under EPA's AFO Air Compliance Agreement in FY 2006, which covered nearly 14,000 farms, including swine operations, dairy operations, egg-laying operations, and broiler chicken operations. Under these agreements, participating AFOs will take part in a twoyear, nationwide monitoring study to evaluate air emissions from AFOs, and EPA will use these data to develop a method for estimating air emissions. Additionally, OECA is settling liability for certain potential past and current violations by these AFOs. The agreements recover nearly \$2.9 million in civil penalties. Following the completion of the monitoring study and the publication of the emission-estimating methodologies, participating AFOs will utilize these methodologies to determine applicable regulatory requirements and then must certify compliance with all applicable requirements.

#### **Mobile Sources**

Mobile source pollutants include smog-forming volatile organic compounds and nitrogen oxides, toxic air pollutants such as cancer-causing benzene, and particulate matter or "soot" that are responsible for asthma and other respiratory illnesses. OECA enforces the Clean Air Act provisions governing motor vehicles and engines, including emissions standards for manufacturers of new motor vehicles, passenger cars and light trucks, and heavyduty motor vehicle engines. The requirements are designed to limit harmful emissions from these vehicles. In FY 2006, DaimlerChrysler agreed to repair defective emissions controls on nearly 1.5 million Jeep and Dodge vehicles from model years 1996 through 2001 at an estimated cost of \$90 million. This action will resolve alleged Clean Air Act violations of failing to properly disclose defective catalytic converters. The company also will pay a \$2 million civil penalty and spend at least \$3 million to implement a Supplemental Environmental Project to reduce emissions from diesel engines currently in use.



#### Superfund Enforcement

Cleanup of Superfund sites is paid for either by the parties responsible for contamination or by the Superfund Trust Fund. Under the Superfund law, OECA is able to make those companies, individuals, or federal agencies responsible for contamination at a Superfund site perform and pay for the cleanup work at the site. OECA has a longstanding policy to pursue "enforcement first" throughout the Superfund cleanup process. This policy helps to conserve the resources of the Superfund for cleanup of those sites where viable responsible parties do not exist. In FY 2006, OECA secured private party and federal agency commitments for cleanup and cost recovery that exceeded \$555 million.

#### Criminal Enforcement

Criminal enforcement is brought against those who knowingly disregard or are criminally negligent in violating environmental laws. Combining state-of-the art forensic analysis and case support, OECA's Office of Criminal Enforcement, Forensics, and Training (OCEFT) investigates violations of federal environmental laws and associated crimes (e.g., mail fraud, smuggling, money laundering, conspiracy).

OCEFT pursues environmental crimes against major national and international corporations, as well as small businesses who violate the law. OCEFT works closely with the Department of Justice to take appropriate and necessary legal action in federal court to bring polluters into compliance with federal environmental laws. Prosecutors can charge individuals, as well as the facility and corporation, with environmental crimes. Indictments against culpable corporate executives provide significant deterrence, which is one of the primary goals of criminal enforcement. Senior decision-makers for the regulated community will think twice about deliberately breaking the law if they understand that they face incarceration, rather than only corporate fines, for their criminal conduct.

The OCEFT Homeland Security Division provides criminal investigative support to other law enforcement agencies in response to suspected terrorist incidents involving releases of pollutants to the environment. This support includes laboratory analysis and scientific support (e.g., forensic evidence collection at crime scenes involving hazardous materials).

The National Enforcement Investigations Center (NEIC), OECA's Forensics Science Division, is a state-of-the-art, accredited forensics center. NEIC scientists, engineers, and environmental professionals provide expert support to both EPA's civil and criminal enforcement programs through compliance monitoring and engineering evaluations, forensic laboratory analysis, information management, computer forensics, and courtroom testimony. NEIC continues to provide scientific forensic support to the enforcement program's national enforcement priorities.

#### **OECA's National Priority Activities**

OECA established national priorities for FY 2005—FY 2007 and announced these priorities through the National Program Managers Guidance in May 2004. OECA uses several criteria to determine whether an activity is appropriate for selection as a national priority.

- ◆ Significant Environmental Benefit: Can significant environmental benefits be gained, or can risk to human health or the environment be reduced, through focused EPA action?
- Pattern of Noncompliance: Are there identifiable and important patterns of noncompliance?
- Appropriate EPA Responsibility: Are the environmental and human health risks or the patterns of noncompliance sufficient in scope and scale such that EPA is best suited to take action?

In support of EPA's 2003-2008 Strategic Plan, OECA designated several important problems as national priorities for compliance and enforcement activities. In FY 2006, the cumulative efforts under the national priorities were responsible for 74 percent of the total air and water pollutant reductions and 71 percent of the value of injunctive relief achieved by OECA. Performance-based strategies were developed to address the national priority problems listed in the following sections.

#### Clean Air Act Priorities

#### **Air Toxics**

Toxic air pollutants are those pollutants that are known or suspected to cause cancer or other serious health effects (e.g., reproductive or birth defects) or adverse environmental impacts. These pollutants come from a wide variety of sources, including industrial and utility operations, as well as smaller manufacturing and commercial sources.





#### **New Source Review**

Modifying an existing source of emissions to increase production or to extend the life of a facility has the potential to increase considerably the amount of pollution emitted from the source or facility. The New Source Review/Prevention of Significant Deterioration (NSR/PSD) national priority strategy aims to achieve maximum compliance with environmental regulations to protect human health and the environment.

#### Petroleum Refining

Annual air emissions from the petroleum refining sector include volatile organic compounds, sulfur dioxide, nitrogen oxide, carbon monoxide, and particulate matter. These air pollutants contribute to respiratory illness and heart disease, contribute to formation of acid rain, reduce visibility, and can be transported over long distances before falling on land or water.

#### Wet Weather Priorities

#### **Concentrated Animal Feeding Operations**

During wet weather events, water flows from concentrated animal feeding operations (CAFOs) transport nutrients such as nitrogen and phosphorus, as well as other pollutants including bacteria, pesticides, antibiotics, hormones, and trace elements including metals, to local waterways. Impacts on ecosystems and human health include contamination of public drinking water sources and private well water, recreational and commercial fish kills and advisories, and beach closings.

#### Combined Sewer Overflows and Sanitary Sewer Overflows

Combined sewer overflows and sanitary sewer overflows cause environmental problems when heavy rainfall or snow melt exceeds the storage capacity of pipes and/or water treatment plants, discharging untreated sewage, stormwater, toxic materials, and industrial wastewater into rivers, lakes, and oceans. Bacteria, pathogens, nutrients, untreated industrial wastes, oil, pesticides, wastewater solids, and debris enter waterways when overflows occur, causing human health risks such as diseases that range in severity from mild gastroenteritis to life-threatening ailments (e.g., cholera and infectious hepatitis).

#### **Stormwater**

Stormwater runoff transports water carrying contaminants directly over land into waterways from large urban areas, construction sites, and municipal separate storm sewer systems and is one of the leading causes of water quality impairment. Typical stormwater pollutants that impair waterways include sediment, bacteria, organic nutrients, hydrocarbons, metals, oil, and grease.

#### Waste Program Priorities

#### **Mineral Processing**

The mineral processing and mining sectors generate more wastes that are corrosive or contain toxic metals than any other industrial sector. Over the past decade, EPA has found that many of the facilities that manage these wastes have contaminated ground water, surface water, and soil, either through failure to comply with state or federal environmental requirements or legally permissible waste management practices. Large-scale mineral

processing and mining operations often severely affect water supplies and wildlife and create environmental damage. Many facilities are located in populated areas, making health risks a significant concern for EPA.



Financial responsibility provisions in federal law require an operator of a treatment, storage, or disposal facility to have adequate funds to address the closure of such a facility. The funds provide for the ability to manage the hazardous wastes, hazardous substances, toxic materials, or other pollutants that these facilities handle so they do not contaminate soil, ground water, surface water, or the air. Having the financial resources to perform closure and cleanup are an important part of protecting human health and the environment from solvents, dioxins, oils, heavy metals, polychlorinated biphenyls (PCBs), and other dangerous pollutants that contaminate soils, ground water, surface waters, and sediments.

#### **Additional Priorities**

#### **Tribal**

OECA works with federally recognized Indian tribes to address significant human health and environmental problems associated with drinking water, solid waste, and environmental risks (e.g., lead-based paint) in tribal schools through capacity building and compliance monitoring.

#### **Environmental Justice**

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and





Rosa Hilda Ramos

Puerto Rican community activist About 1999 EPA settlement with the Puerto Rico Electric Power Authority (PREPA):

"All of us were sick. We raised our voices and EPA
Region 2's Caribbean Environmental Protection
Division, and OECA representatives truly addressed
our concerns. They initiated and completed a process
that improved communication and formed a strong
partnership that changed everything for us. The air
is clean now. A \$3.4 million Supplemental Environmental Project to protect a butterfly and bird sanctuary
is now in process, empowering us to be in charge of our
own lives. The partnership has grown as to even
include the polluters! It is a unique project."



policies. EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards and equal access to the decision-making process to maintain a healthy environment in which to live, learn, and work.

The Office of Environmental Justice (OEJ) coordinates the Agency's efforts to integrate environmental justice into all policies, programs, and activities. EPA's environmental justice mandate extends to all of the Agency's work, including setting standards, permitting facilities, awarding grants, issuing licenses and regulations, and reviewing proposed actions by the federal agencies. OEJ works with all stakeholders to constructively and collaboratively address environmental and public health issues and concerns. OEJ also provides informational, technical, and financial resources to assist and enable the Agency to meet its environmental justice goals and objectives.

#### Engaging the Public

OECA enlists the public's help in identifying potential civil and criminal environmental violations in their communities and workplaces. Public reporting has led to state and federal enforcement cases and ultimately serves environmental protection well.

In January 2006, OECA unveiled the National Report a Violation Web site at www.epa.gov/tips for the public to report possible environmental infractions. A highly visible enforcement badge on EPA's home page invites the public to access OECA's tips and complaints form online. With more than one million people visiting EPA's home page monthly, OECA significantly increased the public's opportunity to protect human health and the environment. The number of tips and complaint submissions more than doubled since the Web site's inception in January 2006.

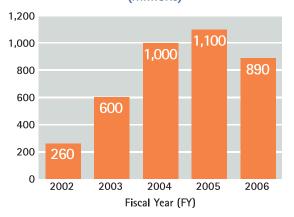
In striving to reach a broader audience, the Web site includes both an English and Spanish Reporting Environmental Violations Form. OECA also developed a brochure in English and Spanish (*Reporting Environmental Violations* and *Denunciando Violaciones Ambientales*) to educate the public about the Web site and potential environmental infractions.



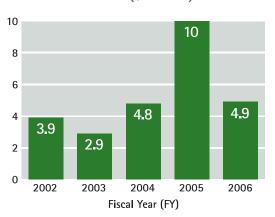
# OECA Continues a Strong Five-Year Record of Substantial Pollution Reductions

n FY 2006, OECA obtained commitments from industry, governments, and other regulated entities to reduce pollution by nearly 900 million pounds. Regulated entities will invest a total of \$4.9 billion to install pollution controls, reduce pollution, and achieve compliance with environmental laws. This reflects a sustained five-year record of pollution reductions totaling almost four billion pounds, and investments of almost \$27 billion in pollution control equipment and other actions to reduce pollution.

### Pounds of Pollutants Reduced (millions)



### Investments in Pollution Control (\$ billions)

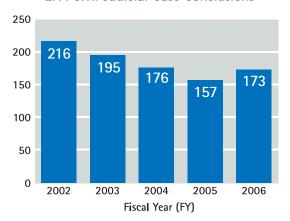


FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006; FY 2002 to FY 2005 Data Source: Annual ICIS data. Disclaimer: Minor corrections may have been made to previous years' data.

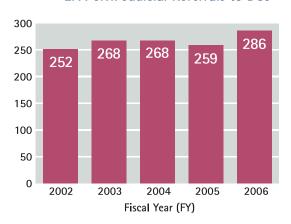
#### Civil Enforcement Activity Increases

In FY 2006, OECA's civil enforcement and cleanup enforcement programs concluded a total of 173 judicial cases and 4,624 final administrative penalty order settlements, a significant increase from FY 2005, and resolved self-disclosed violations for 1,475 facilities. OECA referred 286 civil cases to the U.S. Department of Justice, the highest total in five years.

#### **EPA Civil Judicial Case Conclusions**



**EPA Civil Judicial Referrals to DOJ** 



FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006; FY 2002 to FY2005 Data Source: Annual ICIS data. Disclaimer: Minor corrections may have been made to previous years' data.

# Enforcement Focus on National Air and Water Pollution Priorities Produces Significant Environmental Results

During FY 2006, OECA continued to focus on key air and water pollution problems that were identified as national enforcement priorities for FY 2005-FY 2007, including overflows from combined and sanitary sewer systems (CSOs and SSOs), contaminated stormwater runoff, water contamination from concentrated animal feeding operations (CAFOs), refinery air emissions, toxic air pollutants, and excessive air emissions from sources that failed to comply with the Clean Air Act's New Source Review and Prevention of Significant Deterioration (NSR/PSD) requirements. This focus has produced significant results in environmental and public health benefits. Overall, 74 percent of the total pollution reductions and 71 percent of the total pollution prevention and control investments obtained by the civil enforcement program in FY 2006 were in national priority areas.

#### FY 2006 Civil Enforcement Results From Priority National Initiatives To Reduce Air and Water Pollution

Priority	Pollution Reduced (pounds)	Investment in Pollution Control	Civil Penalties
CAFO	12,197,786	\$9,706,449	\$400,750
CSO/SSO	26,291,797	\$928,795,370	\$1,834,512
Stormwater	194,807,116	\$149,813,726	\$6,574,958
Total Wet Weather	233,296,699	\$1,088,315,545	\$8,810,220
NSR/PSD	134,616,000	\$310,100,000	\$525,000
Toxic Air Pollutants	356,945	\$1,315,442	\$1,214,768
Refining	292,054,000	\$2,073,221,396	\$14,161,163
Total Air	427,026,945	\$2,384,636,838	\$15,900,931
Total	660,323,644	\$3,472,952,383	\$24,711,151

FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006.

#### Civil Air Enforcement Protects Public Health

OECA actions to enforce Clean Air Act requirements in FY 2006 resulted in a total of more than 583 million pounds of pollutants reduced. This reduction will have substantial benefits for public health. The top 11 air enforcement actions alone will result in annual reductions of harmful air emissions of sulfur dioxide ( $SO_2$ ) and nitrogen oxides ( $NO_x$ ) totaling 379 million pounds and 92 million pounds, respectively. When the consent decrees entered in FY 2006 are fully implemented (e.g., all required pollution controls are installed and in operation), the annual human health benefits from these air emission reductions are valued at \$3.5 billion. The health benefits include reducing premature deaths among people with heart or lung disease, preventing hundreds of cases of bronchitis and nonfatal heart attacks, as well as preventing thousands of cases of respiratory ailments, including aggravated asthma. The most significant air pollution reductions from enforcement actions concluded in FY 2006 resulted from OECA's work in national priority areas.





#### FY 2006 Results From Air Priority Initiatives

Priority	Pollutants Reduced (pounds)	Investments in Pollution Control				
NSR/PSD	135 million	\$310 million				
New source review/prevention of significant deterioration requirements of the Clean Air Act requires industrial facilities to obtain permits for plant modifications that increase air pollution emissions.						
Toxic Air Pollutants	0.4 million \$1 million					
Toxic air pollutants are known or suspected to cause cancer or other serious health effects such as reproductive or birth defects, or adverse environmental impacts.						
Petroleum Refining	292 million	\$2,073 million				
Air emissions from petroleum refineries such as volatile organic compounds, sulfur dioxide, nitrogen oxide, carbon monoxide and particulate matter contribute to respiratory illness and heart disease and can travel long distances before falling on land and water.						
Total	427.4 million	\$2,384 million				

FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006.

OECA's multi-year focus (FY 2005-FY 2007) on reducing pollution from petroleum refineries resulted in a total of 85 refineries (representing 77 percent of domestic refining capacity) being subject to enforceable orders and consent decrees requiring substantial pollution reductions. Negotiations are ongoing with refiners representing an additional 11 percent of capacity.

# Civil Water Enforcement Reduces Discharges and Improves Sewer Systems

OECA's actions to enforce Clean Water Act requirements in FY 2006 resulted in more than 283 million pounds of pollutants reduced. Most of these reductions are the result of EPA's national priority efforts to control overflows from CSOs and SSOs and contamination caused by surface runoff from stormwater and CAFOs. Water pollution from these sources, including sediment, bacteria, raw sewage, untreated industrial wastes, and animal wastes, will be reduced by more than 230 million pounds as a result of enforcement actions concluded in FY 2006.

One of the most critical water enforcement priorities on which OECA focused is the reduction of overflows and discharges of untreated sewage from CSOs and SSOs into the nation's waters. Working in partnership with states, OECA concluded major settlements with

dozens of the nation's cities to bring critical sewer systems back into compliance. The settlements require comprehensive plans to improve the maintenance and operation of systems to reduce overflows, and long-term capital construction projects to expand treatment capacity to ensure that sewage is properly treated before being discharged. The settlements concluded in FY 2006 will reduce overflows of untreated or inadequately treated sewage by 26 million pounds, with an estimated investment of \$930 million in sewer system upgrades and improvements.

#### FY 2006 Results From Water Priority Initiatives

Priority	Pollutants Reduced (pounds)	Investments in Pollution Control				
Stormwater	195 million	\$150 million				
Stormwater runoff from large urban areas transports contaminants directly over land and into waterways.						
CAFO	12 million \$10 million					
Water discharges and runoff from concentrated animal feedlots (during wet weather events), transport nutrients, bacteria, pesticides, antibiotics and hormones to local waterways.						
CSO/SSO 26 million \$930 million						
Combined sewer overflows and sanitary sewer overflows discharge untreated sewage, industrial wastewater, and other pollutants into rivers, lakes, and oceans when wet weather events exceed the storage capacity of pipes and treatment plants.						
Total	233 million \$1,090 million					

FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006.

#### Toxic Substances Control Act (TSCA) Civil Enforcement Results in Largest Administrative Penalty

In FY 2006, OECA reached a significant settlement with DuPont, a large chemical manufacturing company, for TSCA violations. The administrative enforcement action against DuPont for failing to report substantial risk information about the synthetic chemical perfluorooctanoic acid (PFOA) resulted in a settlement under which DuPont agreed to pay a \$10.25 million penalty, the largest civil administrative penalty EPA has ever obtained under any federal environmental statute. The TSCA settlement includes





two Supplemental Environmental Projects valued at \$6.25 million that are expected to result in the disclosure of previously unreported information that will help the scientific community better understand the presence of toxic substances in the environment and potential risks they pose to the public.

# Criminal Enforcement Focuses on High Impact Cases

During FY 2006, OECA's Criminal Enforcement Program increased its number of national enforcement priority investigations almost five-fold by opening 24 cases (up from five last year) in six national priority areas. OECA participated in the successful prosecution of several high-impact cases that secured large sentences, enhanced deterrence, and reduced environmental pollution. Following the longest environmental crimes trial (seven months) since the criminal environmental enforcement program was established in 1982, the Atlantic States Cast Iron Pipe Company and four individual defendants were found guilty of numerous violations. Sentencing is scheduled for later in 2007. As a result of all of the criminal sanctions assessed in FY 2006, defendants will serve a total of 154 years in jail and pay almost \$43 million in fines, as well as an additional \$29 million in environmental projects imposed as part of the sentences.

FY 2006 Criminal Enforcement Program Results				
Environmental crime cases initiated 305				
Defendants charged	278			
Sentences (years)	154			
Fines and restitution	\$43,000,000			
Judicially mandated projects (cost in dollars)	\$29,000,000			
Pollutant reductions (pounds)	17,000,000			

FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006.

#### Superfund Enforcement Gets Sites Cleaned Up

As a result of OECA's Superfund enforcement actions in FY 2006, parties responsible for hazardous waste pollution at Superfund sites will pay \$391 million to study and clean up contamination, including 15 million cubic yards of contaminated soil and approximately 1.3 billion cubic yards of contaminated ground water. In addition, potentially responsible parties agreed to pay \$164 million to reimburse EPA's past expenditures at Superfund sites, allowing additional sites to be cleaned up. OECA continues to follow an "enforcement first" strategy to preserve Superfund funds for sites where there are no viable responsible parties.

#### Federal Facilities Enforcement

In FY 2006, EPA's Federal Facility Enforcement Office (FFEO) Superfund enforcement efforts resulted in federal agency commitments to clean up more than 850 million cubic yards of soil, sediment, and water at facilities they operate. Federal agencies also committed to significant improvements in environmental compliance, preventive measures or management improvements at their facilities. The total cost of direct environmental benefits and corrective action that the federal agencies committed to is more than \$125 million. Federal facilities also will pay close to \$400,000 in penalties as a result of enforcement actions taken this year.

# NEPA Review and Tracking of International Shipments

FY 2006 was the sixth year in which OECA's Office of Federal Activities (OFA) collected data on the effectiveness of EPA's reviews of other agencies' environmental impact statements (EISs) required under the National Environmental Policy Act (NEPA). The data continue to show that EPA's review is helping agencies identify mitigation measures that can avoid or minimize the potential adverse environmental impacts of their proposed projects. For FY 2006, agencies agreed to mitigate 70.7 percent of the significant environmental impacts identified by EPA in its review of their draft EISs, meeting and exceeding our goal of 70 percent.

In FY 2006, OFA reviewed and processed 972 hazardous waste notices and 9,024 waste streams for imports and exports of hazardous waste. These actions ensured environmentally sound management of both hazardous wastes entering the United Sates and U.S.-generated hazardous wastes destined for foreign countries. For example, OECA's objection to a notification of intent to import hazardous waste prevented the importation of 20,000 liters of hazardous waste to a U.S. facility that could not properly manage it.

# OECA Strengthens Commitment to Environmental Justice

In FY 2006, EPA Administrator Stephen L. Johnson reaffirmed the Agency's commitment to environmental justice by directing Agency staff to establish measurable outcomes that address the eight national environmental justice priorities. The priorities are:

- Reducing asthma attacks
- Reducing toxic air pollutants
- Reducing blood lead levels



- Ensuring that companies meet environmental laws
- Ensuring that fish and shellfish are safe to eat
- Ensuring that water is safe to drink
- Revitalizing brownfields and contaminated soils
- Collaborative problem solving

EPA renewed the charter of the National Environmental Justice Advisory Council, the federal advisory committee that provides the Administrator with advice and recommendations on broad environmental and/or public health policy issues. In FY 2006, OECA developed an Environmental Justice Action Plan and identified opportunities to integrate environmental justice considerations into day-to-day operations. OECA is developing the Environmental Justice Smart Enforcement Assessment Tool (EJSEAT) for use in OECA's enforcement and compliance programs. The EJSEAT desktop tool (available to OECA staff in 2007) will assist OECA in focusing on communities with the greatest need.

#### Coal Fired-Electric Utilities

Since 1999, EPA and the Department of Justice have filed a number of lawsuits against coal-fired electric utilities alleging that these companies made major modifications to their plants without installing equipment to control pollution that causes smog, acid rain and soot and that contributes to severe respiratory problems and childhood asthma under the New Source Review provisions of the Clean Air Act.

OECA litigated and resolved several of these lawsuits and negotiated settlements with 11 companies: Tampa Electric Company; PSEG Fossil; Southern Indiana Gas and Electric Company; Virginia Electric Power Company; Alcoa; Wisconsin Electric Power Company; Santee Cooper; Illinois Power and Dynegy Midwest Generation; Ohio Edison; Alabama Power Company James H. Miller, Jr. Plant; and Minnkota Power Cooperative and Square Butte Electric Cooperative. These settlements will result in the removal of approximately one million tons of pollution from the air annually and an expenditure of about \$5.8 billion to install state-of-the-art air pollution controls.



## Message on Behalf of State Environmental Commissioners

n behalf of the states, the Environmental Council of the States (ECOS) is pleased to present information on the states' efforts to enforce and ensure compliance with the nation's environmental laws for the EPA OECA FY 2006 Accomplishments Report. The states work closely with EPA across the country to ensure better protection for human health and the environment, and we look forward to continuing our strong partner-ship for years to come.

ECOS and EPA are helping the public to understand the role of the states in ensuring compliance with environmental laws. This report offers the chance to both clarify our role for the public and present some of the recent accomplishments from state efforts. A little known fact about state efforts is that the states collect about 94 percent of the environmental quality data that reside in EPA databases. Most of these data are generated from state issued permits and state air, water, and waste monitoring programs. In addition, the states make extensive use of voluntary programs, economic incentives, and information dissemination through compliance assistance programs, to prevent pollution before it occurs.

This is the first time information documenting the role of the states' enforcement and compliance activities has been included in the OECA Accomplishments Report, in part because it is difficult to collect, summarize, and analyze data for all 50 states. The information that we present is drawn from 1995-2003 survey data from the June 2006 ECOS report entitled *State Environmental Agency Contributions to Enforcement and Compliance: 2000-2003* and its predecessor (April 2001) of the same title. We are working hard with EPA to meet the challenges of comprehensive and better reporting on behalf of the states and hope to be able to present more recent information in future reports.

Enforcement and compliance programs are an integral part of state programs designed to protect human health and the environment. We encourage you to contact state agencies to learn more about what the states and local governments do and to learn more about what you can do as a citizen and individual to ensure a safe and healthy environment for the future.

ROBERT W. KING, JR.

President, Environmental Council of the States Deputy Commissioner, South Carolina Department of Health and Environmental Control



# Update on State Enforcement and Compliance Results

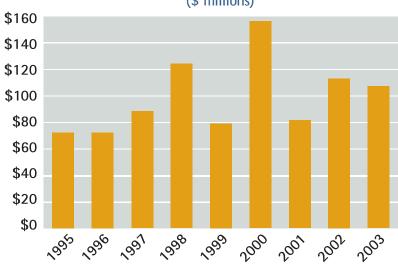
#### Background

he state programs play a significant role in ensuring compliance with environmental laws. Programs that carry out requirements of the major national environmental laws can be authorized or delegated to the states. To be authorized or delegated to implement a federal program, a state must demonstrate the capacity to administer all aspects of the program—one of the most important being the capacity to enforce the law. Federal law establishes national standards of compliance. The states are permitted, and often do, pass laws with requirements more stringent than federal standards.

With authorization or delegation, the states are integral partners in the nation's environmental protection system. State agencies write rules, set standards, issue permits, conduct monitoring, provide information to the regulated community and the public, assess environmental quality, provide compliance assistance, conduct inspections, and take enforcement actions leading to even greater overall protection of the environment.

In carrying out these activities, the states collect about 94 percent of the environmental quality data retained in each of six major EPA national data systems. State enforcement

Total Penalties Collected by States 1995—2003 (\$ millions)



Data Source: June 2006 ECOS Report, State Environmental Agency Contributions to Enforcement and Compliance: 2000-2003 – Table 3-7.

programs are robust and contribute substantially to protecting the nation's environment.

The states also believe it is important to ensure that the regulated community achieves and sustains compliance. The states have made substantial investments in non-traditional enforcement and compliance tools and technical assistance to provide clear and consistent information to industry. Many state compliance assistance programs are designed to prevent pollution before it occurs.

#### State Enforcement

The states, like EPA, employ a broad range of tools in their enforcement programs, including the assessment and collection of fines and penalties. For the period 2000-2003, both the number of states utilizing enforcement mechanisms and the number of programs using these tools increased. The greatest increases include 203 percent for field citations and 178 percent for stipulated penalties. Between 1995 and 2003, states increased the total penalties assessed by 49 percent. The penalties totaled more than \$892 million.

#### State Use of Supplemental Environmental Projects

In negotiating penalties in enforcement cases, 49 states have the ability to mitigate a portion of the penalty in exchange for Supplemental Environmental Projects (SEPs). SEPs not only provide tangible improvements where a violation has occurred, but they frequently engage community stakeholders and address environmental justice concerns. For example, SEPs can provide diagnostic, preventative, and/or remedial health care for members of an exposed community; clean up and restore contaminated buildings and sites; or restore damaged stream banks and wetlands.

In the period 2000-2003, state respondents agreed to perform SEPs totaling \$96.2 million and were assessed \$62.3 million in penalties. From 1995-2003, states secured \$171.3 million in SEPs under enforcement settlements.

#### **State Compliance Assistance Programs**

The states deliver compliance assistance either directly from the state agencies, or through third parties such as contractors or grantees. The information provided to the regulated community and others is designed to help find cost-effective ways to improve environmental performance, including the use of pollution prevention and improved or innovative management practices or technology. The respondents to the 2001-2003 survey reported:

- Extensive use of workbooks, onsite visits, Web sites, educational seminars, and permit assistance.
- ◆ 56 percent now accept electronic permit applications in more than one program and
   28 percent issue one or more program permits electronically.
- ◆ 46 percent include reporting pollution prevention results.





#### Additional State Compliance Assistance Facts

- 91 percent of state survey respondents have compliance assistance programs.
- ◆ 30 percent have compliance assistance programs in all applicable delegated programs.
- 90 percent use compliance assistance programs to address facilities and/or industry sectors that core program targets do not address (e.g., minor sources, pollution prevention).
- → 77 percent of respondents are supporting compliance assistance activities with grants, loans, and tax incentives, or some combination of the same.²

#### State Compliance Monitoring

The number of regulated facilities that require state agency oversight is quite large. In 2003, the states reported more than 3 million regulated facilities, an increase of 46 percent from 1999. Between 2000 and 2003, the total number of regulated facilities increased from 326,960 to 439,941 in all five major environmental programs—air, drinking water, surface and ground water, hazardous waste, and solid waste.

For the same period and for the same program areas, the overall number of compliance inspections increased by 19 percent, from 114,295 to 135,644. The number of inspections for solid waste facilities more than doubled. In addition, the number of reviews of sampling and testing records submitted by facilities increased from 400,914 to 522,495.

#### Regulated Facility Sites for Major Programs – 2000 to 2003

Program	States Reported	2000	2001	2002	2003
Air	26	80,858	90,021	96,459	118,665
Drinking Water	21	66,453	66,841	68,181	78,742
Surface and Ground Water	21	38,329	40,724	44,239	58,803
Hazardous Waste	21	135,885	138,873	141,131	165,415
Solid Waste	13	5,435	5,286	6,903	18,316
Total	102	326,960	341,745	356,913	440,420

Data Source: June 2006 ECOS Report, State Environmental Agency Contributions to Enforcement and Compliance: 2000-2003 – Table 2-2.

<sup>&</sup>lt;sup>2</sup> 39 of the 42 states responded to the compliance assistance portion of the survey for 2000-2003. The definition and scope of compliance assistance can vary between the states and EPA.

#### $\label{localization} \mbox{Compliance Inspections for Major Programs} - 2000 \ to \ 2003$

Program	States Reported	2000	2001	2002	2003
Air	26	34,870	33,768	31,780	31,441
Drinking Water	21	36,915	36,524	46,415	50,735
Surface and Ground Water	21	29,192	36,342	37,558	35,619
Hazardous Waste	21	9,206	9,812	10,160	9,099
Solid Waste	13	4,112	5,443	9,583	8,750
Total	102	114,295	121,889	135,496	135,644

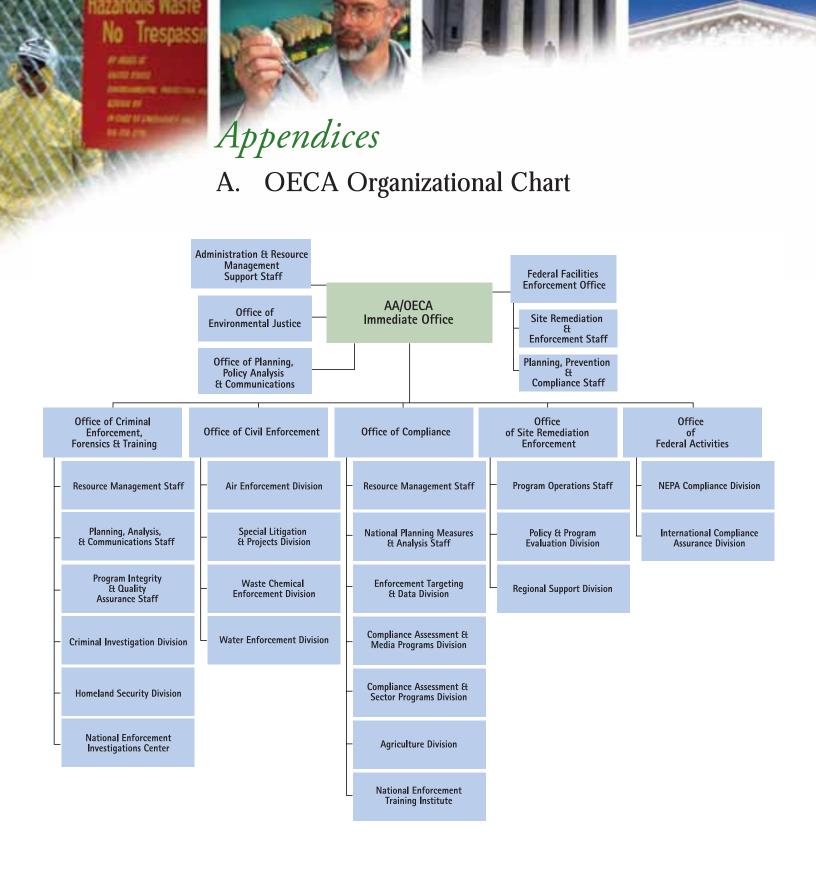
Data Source: June 2006 ECOS Report, State Environmental Agency Contributions to Enforcement and Compliance: 2000-2003 – Table 2-4.

#### Offsite Record Reviews for Major Programs – 2000 to 2003

Program	States Reported	2000	2001	2002	2003
Air	26	32,235	51,943	48,959	64,279
Drinking Water	21	241,172	220,787	348,040	294,294
Surface and Ground Water	21	121,289	135,328	148,445	154,165
Hazardous Waste	21	3,896	3,658	6,578	6,384
Solid Waste	13	322	936	1,169	1,370
Total	102	400,914	414,653	555,193	522,495

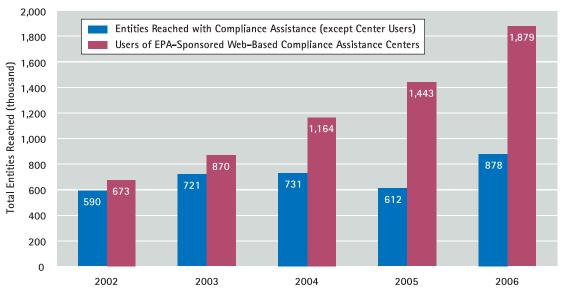
Data Source: June 2006 ECOS Report, State Environmental Agency Contributions to Enforcement and Compliance: 2000-2003 – Table 2-6.





#### B. Selected FY 2002-FY 2006 Trends

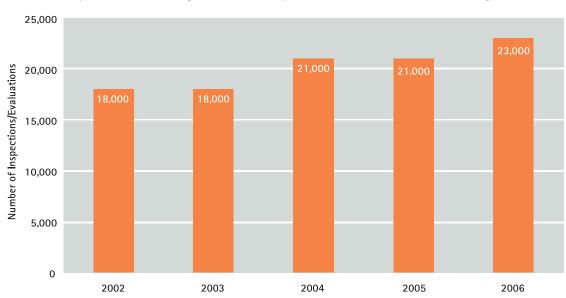
#### Entities Reached with EPA Compliance Assistance



FY 2006 Data Sources: Integrated Compliance Information System (ICIS), October 28, 2006 and online usage report; data source for previous fiscal years: annual ICIS data and online usage reports.

Disclaimer: Minor corrections may have been made to previous years' data.

#### Compliance Monitoring Number of Inspections/Evaluations Conducted by EPA



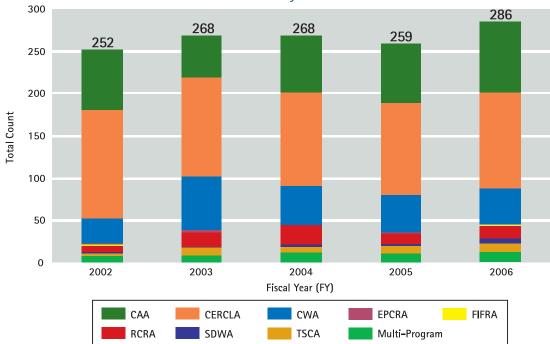
FY 2006 Data Sources: Integrated Compliance Information System (ICIS), October 28, 2006 and online usage report; data source for previous fiscal years: annual ICIS data and online usage reports.

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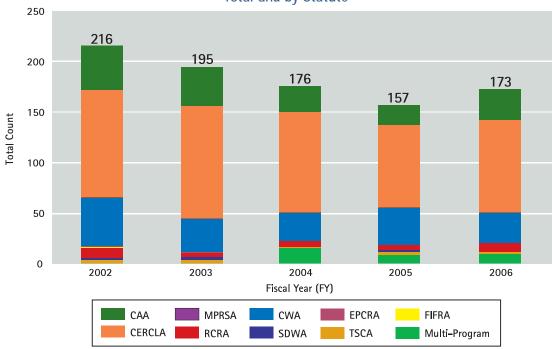
#### EPA Referrals of Civil Judicial Enforcement Cases to Department of Justice Total and by Statute



FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006; data source for previous fiscal years: annual ICIS data.

Disclaimer: Minor corrections may have been made to previous years' data.

#### EPA Civil Judicial Enforcement Case Conclusions Total and by Statute



FY 2006 Data Source: Integrated Compliance Information System (ICIS), October 28, 2006; data source for previous fiscal years: annual ICIS data.

Disclaimer: Minor corrections may have been made to previous years' data.

#### Help Us Protect the Environment



### Report Environmental Violations at: www.epa.gov/tips

It is EPA's mission to protect human health and the natural environment—the air, land and water on which life depends. As citizens, each of us can help protect the environment by reporting suspected environmental violations in our communities to the proper authorities. We want to make this as easy as possible on our Web site.

Press the badge on our enforcement and compliance assurance home page to report a suspected environmental violation in your community.

Many of our enforcement actions originate from information provided by citizens. Not all are violations of federal law, but we work closely with state, local and tribal authorities to protect the environment. If we are unable to address your problem at the federal level, we will pass the information along to a state or local authority.

#### Know the signs of environmental trouble:

- Strong, offensive, or unusual chemical odors
- Large numbers of dead animals, including birds or fish
- Pipes or valves that bypass waste water treatment systems
- Tank trucks discharging into drains, manholes or surface waters
- Oily slicks on bodies of water
- Corroded, leaking waste containers
- Barrels dumped at odd hours or in out-of-the-way places







